



The diagram illustrates the internal components of a 3-speed Simpson gear set. It consists of two main shafts: an input shaft (labeled '3' and '4') and an output shaft (labeled '5' and '6'). The input shaft has three gears: a 3.090 gear (1st), a 2.201 gear (2nd), and a 1.538 gear (3rd). The output shaft has three corresponding gears: a 3.091 gear (1st), a 1.539 gear (2nd), and a 1.000 gear (3rd). The gear ratios are calculated as follows: 1st gear ratio is 3.090 / 3.091 = 0.712; 2nd gear ratio is 2.201 / 1.539 = 1.431; 3rd gear ratio is 1.538 / 1.000 = 1.538. The diagram also shows the rotation directions for each gear, indicated by arrows. The input shaft rotates clockwise, and the output shaft rotates counter-clockwise.

GEAR	1	2	3	4	5	6
2-SPEED OD SET	LOW 1	HIGH 0.712	LOW 1	HIGH 0.712	LOW 1	HIGH 0.712
	<p>Diagram showing gear ratios and shaft rotation directions for the 2-Speed OD Set.</p>					
	<p>Diagram showing gear ratios and shaft rotation directions for the 3-Speed Simpson Gear Set.</p>					
3-SPEED SIMPSON GEAR SET	1st 3.090	1st 3.091	2nd 1.538	2nd 1.539	3rd 1.000	3rd 1.000
	<p>Diagram showing gear ratios and shaft rotation directions for the 3-Speed Simpson Gear Set.</p>					
	<p>Diagram showing gear ratios and shaft rotation directions for the 3-Speed Simpson Gear Set.</p>					
TOTAL GEAR RATIO	3.09	2.201	1.538	1.096	1	0.712

